AMEBIASIS

Clinical Features: There are two forms of amebiasis: intestinal and extraintestinal. The intestinal form of the disease is usually asymptomatic, ranging from acute mild abdominal discomfort to chronic diarrhea and fulminating dysentery. Fever, chills, and bloody mucoid diarrhea may also be present. Diarrheal episodes may alternate with periods of constipation or remission. The extraintestinal form appears in severe cases, often characterized by amebic liver abscesses. Infection also may be asymptomatic.

Causative Agent: The protozoan parasite, Entamoeba histolytica.

Mode of Transmission: E. histolytica predominantly infects humans and other primates. Transmission among humans most often occurs through ingestion of chlorine-resistant amebic cysts present in fecally contaminated water or food. Oral-anal sexual contact is also a risk factor for infection.

Incubation Period: Onset of symptoms usually occurs 2 to 4 weeks after infection, but this may be variable.

Period of Communicability: Infection may occur as long as cysts are present in stool, which may continue for years.

Public Health Significance: Amebiasis is of public health concern due to the prolonged shedding period and the severe complications that may develop, usually involving the liver. Immunocompromised persons are also at increased risk of developing the severe form of disease. Treatment (e.g. iodoquinol, paromomycin, metronidazole) is available for both intestinal and extraintestinal amebiasis.

Reportable Disease in Kansas Since: 1982.

Clinical Criteria

➤ Infection of the large intestine by *Entamoeba histolytica* may result in an illness of variable severity ranging from mild, chronic diarrhea to fulminant dysentery. Extraintestinal infection also can occur (e.g., hepatic abscess).

Laboratory Criteria for Surveillance Purposes

- ➤ Intestinal amebiasis
 - Demonstration of cysts or trophozoites of *E. histolytica* in stool or
 - Demonstration of trophozoites in tissue biopsy or ulcer scrapings by culture or histopathology
- > Extraintestinal amebiasis

• Demonstration of *E. histolytica* trophozoites in extraintestinal tissue

Surveillance Case Definitions

- ➤ Confirmed, intestinal amebiasis: a clinically compatible illness that is laboratory confirmed. Asymptomatic intestinal carriage of *E. histolytica* should not be reported.
- ➤ Confirmed, extraintestinal amebiasis: a parasitologically confirmed infection of extraintestinal tissue, or among symptomatic persons (with clinical or radiographic findings consistent with extraintestinal infection), demonstration of specific antibody against *E. histolytica* as measured by indirect hemagglutination or other reliable immunodiagnostic test (e.g., enzyme-linked immunosorbent assay). Among asymptomatic persons, a positive serologic test does not necessarily indicate extraintestinal amebiasis.

Epidemiology and Trends

2005 Kansas Count: 7

	Rate per 100,000	95% CI
Kansas Rate	0.3	(0.1 - 0.4)
U.S. Rate (2004)	NA	NA

Seven cases of intestinal amebiasis were reported during 2005. No cases were reported during 2004; the three-year median for 2002-2004 was four cases.